# RF2P-ULS-GF22FDX-PLUS Dual Port Register File Compiler



# (1 Read-only port, 1 Write-only port)

## **Highlights**

- $\hbox{ } \hbox{ Low Leakage: Uses modified 8T-TP185SL bit cells with high } V_T \, read \, port \, for \, reduced \, leakage \, and \, larger \, instance \, support.$
- Isolated Supplies: Periphery and array power domains can be independently powered down in standby mode.
- Deep Sleep Standby Mode: Memory retains data at minimal power via internal biasing.
- Timing Margin Controls: Internal pins adjust read/write timing margins.
- Integrated BIST Mux Integration for Built-In Self Test support.
- Speed vs Leakage Tradeoff Option

### **Technology and Specs**

Technology	22FDX-PLUS	Max Instance	64 Kb
Voltage	0.8V (0.72V to 0.88V)	Min Instance	128b
Temperature	-40°C to +125°C	Word Width	4-64
Power	Mesh	Word Depth	16-2048
# Metal Layers	4	Aspect Ratio	Column Fold: 4 or 8
BIST Mux	Internal	User Interface	Command line
Modes	Functional, Sleep, Bist, Scan	Bit Write Enable	Optional

VCS_N	RCS_	_N		
	0			
				DO
_				
STDB	Y_N			
		STDBY_N		

EDA Views (Partial List)					
Verilog Model with UPF					
Liberty Files	iberty Files (NLDM, LVF, CCS)				
PDF and					
Text					
Datasheets	Redhawk APL				
	Verilog Test				
LEF 5.8	Bench				
LVS SPICE					
Netlist	Bitmap File (x, y)				
	Power Grid				
GDS	(Voltus)				
Tessent					
MBIST	Common Power				
Control File	Format (CPF)				

#### **About Mobile Semiconductor**

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